

Remarks

Applicants have amended Claims 1-11 to correct informalities and typographical errors in accordance with the Examiner's recommendations. No new matter has been added, and no new material presented that would necessitate an additional search on the part of the Examiner. Upon entry of this Amendment and Response, claims 1-11 remain pending.

Objections

Claims 8, 10 and 11 were objected to because of various informalities. Applicants thank the Examiner for pointing out these errors and providing recommendations for correction.

Specifically, claim 8 was objected to because the term "correction means" was misspelled as "collection means". In response, applicants have corrected this typographical error so that the term now properly reads "correction means".

Claim 10 was objected to because the phrase "sub-regions map" was misspelled as "regions map". In response, applicants have corrected this typographical error so that the term now properly reads "sub-regions map".

The Examiner also recommended that claims 1-11 be edited to remove citations in parentheses. In response, applicants have amended claims 1-11 in accordance with the Examiner's recommendation.

In view of these amendments, applicants respectfully request withdrawal of the Examiner's objections to the claims.

Rejections Under 35 U.S.C. 102(b)

Claims 1-11 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 6,389,310 (Demonceau et al.). Applicants respectfully traverse.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Manual of Patent Examining Procedure* § 2131 (8th ed., Rev. 4, Oct. 2005), citing *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q. 2d 1051, 1053 (Fed. Cir. 1987). Thus, the standard for rejection under 35 U.S.C. § 102 is identity.

Factual analysis below shows that the apparatus disclosed in Demonceau et al. is not the same as the subject matter of applicants' claimed invention.

Demonceau et al. disclose a computer system for the treatment of data obtained from synchronized electrocardiogram tomoscintigraphy. The data of Demonceau et al. is correlated to an image giving the activity of a heart comprising auricles, ventricles, valves and septum. Demonceau et al. does not disclose or otherwise suggest applicants' claimed medical imaging system for at least the following reasons.

First, Demonceau et al. describe an apparatus for analyzing heart function using ECG synchronized heart cavity tomoscintigraphy. The disclosure of Demonceau et al. is limited solely to displaying data related to the heart. Additionally, the apparatus of Demonceau et al. requires the use of radioisotopes in order to acquire a two dimensional image. Applicants' claimed imaging system has no such limitations. Unlike the apparatus described in Demonceau et al., applicants' invention can be used in an ultrasound imaging system, and can be used to image any region of the body.

Second, applicants' claimed system provides a means for calculating a sub-region map within the 2D segmented region as well as a correction means to exclude selected sub-regions. Demonceau et al. do not describe or otherwise suggest either of these features of applicants' invention. Rather, Demonceau et al. describes segmenting a 3D image using a 3D watershed algorithm by removing segments on the boarder image. The removal of the boarder image is part of segmenting the 3D image in Demonceau et al. (Demonceau et al. Col. 28, Ins. 26-46). No sub-region map is generated by Demonceau et al., and no exclusion of selected sub-regions is described.

The legal standard for rejection under 35 U.S.C. §102 is identity. As shown above, the disclosure of Demonceau et al. is not the same as the subject matter of applicants' claimed invention (e.g., Claims 1, 8 and 10). Claims 1-7, 9 and 11 depend directly or indirectly from independent claims 1, 8 and 10, and incorporate the subject matter of these claims and contain additional subject matter. Thus, because claims 1, 8 and 10 are not anticipated by Demonceau et al., claims 1-7, 9 and 11 also are not anticipated by this reference.

Accordingly, Applicant respectfully assert that claims 1-11 are novel in view of Demonceau et al., and respectfully requests withdrawal of the Examiner's rejection under 35 U.S.C. §102(b).

Summary

In view of the foregoing amendments and remarks, Applicant respectfully submits that the pending claims are in condition for allowance, which is respectfully requested.

If there are any questions regarding these remarks, the Examiners are invited and encouraged to contact Applicants' representative at the telephone number provided.

Respectfully submitted,

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